Polycystic Ovary Syndrome
(PCOS; Stein Leventhal Syndrome; Polyfollicular Ovarian Appearance; Hyperandrogenic Anovulation; Polycystic Ovarian Disease; PCO; PCOD)

Definition
Polycystic ovary syndrome (PCOS) is a chronic endocrine disorder in women. With PCOS, the ovaries make follicles, but the follicles do not mature and release a mature egg each month as they should. The immature follicles can turn into fluid-filled sacs called cysts.

Ovary and Fallopian Tube

Causes
The cause is not exactly known. Genes may play a role. The problem appears related to insulin resistance that creates high levels of insulin. These high insulin levels cause too much androgen to be made by the ovaries. More androgen than normal can increase the presence of some masculine features. It also prevents ovulation and leads to enlarged, polycystic ovaries. Other features may include:

- Hirsutism—undesired or excess hair growth on the face and body
- Acne
**Risk Factors**

Factors that may increase your chance of PCOS:
- Family members with PCOS
- Irregular menstrual cycles
- Obesity
- Sedentary lifestyle

**Symptoms**

Some women may not have symptoms. In others, they may appear between the ages of 15-30 years. In women who have symptoms, PCOS may cause:

- Infertility
- Amenorrhea—irregular menstrual periods or no menstrual period
- Obesity
- Dark, thickened patches of skin on the neck, groin, and armpit areas • Hair loss from the scalp

Women with PCOS are also at increased risk for:

- Type 2 diabetes
- High cholesterol
- High blood pressure
- Metabolic syndrome—A condition marked by elevated blood pressure, cholesterol, blood glucose, and body weight. Excess weight centered around the midsection is of particular concern.
- Heart disease
- Endometrial hyperplasia—A precancerous condition marked by overgrowth and thickening of the uterine lining because of infrequent periods.
- Endometrial cancer

**Diagnosis**

The doctor will ask about your symptoms and medical history. A physical exam will be done. An ultrasound may be done to look for multiple cysts on the ovaries.

Urine and blood tests may be done to look for potential causes or check for pregnancy.

**Treatment**

Treatment differs according to whether you want to conceive or not. The goal of treatment is to target the underlying insulin resistance that accompanies PCOS.

Other treatment steps may include:

- Managing symptoms
- Weight loss if overweight
- Healthy eating
- Exercise
- Medications to improve insulin resistance, glucose intolerance, and prediabetes management • Oral contraceptive
- Inducing ovulation (if you want to get pregnant) with:
  - Metformin or clomiphene citrate
Hormonal Therapy

Birth control pills regulate periods. Also, by causing the uterine lining to shed regularly, they reduce the risk of overgrowth or cancer. They also control abnormal hair growth and acne by suppressing androgen. Fertility drugs may be given to stimulate ovulation when a woman with PCOS is ready to become pregnant.

Prevention

There are no current guidelines to prevent PCOS.